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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,034

09/22/2003

James D. Ralph

F-295

1511

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7590

10/02/2009

SPINE MP

LERNER, DAVID, et al.

600 SOUTH AVENUE WEST

WESTFIELD, NJ 07090

EXAMINER

SWIGER III, JAMES L

ART UNIT

PAPER NUMBER

3775

MAIL DATE

DELIVERY MODE

10/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,034	<b>Applicant(s)</b> RALPH ET AL.	
	<b>Examiner</b> JAMES L. SWIGER	<b>Art Unit</b> 3775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10,13 and 14 is/are rejected.
- 7) ☒ Claim(s) 15-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/22/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/2009 has been entered.

### ***Claim Objections***

Claim 13 is objected to because of the following informalities: Claim 13 is improperly depending from a cancelled claim 11. For examination purposes, it will be considered to depend from claim 9.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US Patent 6,425,920) in view of Gross et al (US Patent 5,306,308) and Büttner-Janz et al (US Patent 5,501,269).

Hamada discloses (Figures 16-18) an intervertebral spacer (201) comprising: a spacer body with a central bore (203) passing through the upper (205) and lower (209) surfaces; both of the surfaces are substantially flat (as seen in Figure 17); the upper and lower surfaces are diametrically tapered (as seen in Figure 17).

Hamada discloses all of the claimed limitations except for a beveled edge extending around the spacer body circumference, relative designation marks, and a tapered axially medial groove.

Gross et al teach (Column 2, Lines 41-45) that a tapered axially medial groove (7) simplifies the surgical procedure by allowing the implant to be held and inserted by surgical forceps. Additionally, Gross has radially outwardly extending division lines, which would function as relative angle designation marks. These are evenly spaced and would provide the surgeon with a view of relative angle. It would have been obvious to one having ordinary skill in the art at the time of invention to provide a tapered medial groove and also the relative angle designation marks to the device of Hamada to allow surgical forceps to grip the implant and assist with placement by having relative angle marks, thereby facilitating the surgical procedure.

Büttner-Janz et al teach (Figures 1-15) intervertebral spacers having either an approximately 90 degree edge or a beveled edge extending around the circumference of the spacer. Since both a 90 degree design and a beveled design are disclosed as an appropriately shaped edge to the upper and lower surfaces of an intervertebral spacer, they are deemed equivalent structural shapes for providing an edge to an intervertebral spacer. It would have been obvious to one having ordinary skill in the art at the time of

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invention to provide for a beveled edge about the circumference of the device of Hamada as a mere matter of substitution with predictable results. This is further supported since applicant has not disclosed that a beveled edge solves any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing an edge on an intervertebral spacer. *In re Dailey and Eilers*, 149 USPQ 47 (1966).

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada in view of Gross et al, further in view of Büttner-Janz et al, and additional in view of Boyle et al (US Patent 6,277,149)

The Hamada in view of Gross et al and Büttner-Janz et al. disclose and teach all of the claimed limitations except for the body having a porous surface. Boyle et al teach (Figure 21; Element 800; Column 6, Lines 29-32) that perforations (800) along the surfaces are configured to receive bone growth material which is well known in the art to improve fixation with the surrounding bone. It would have been obvious to one having ordinary skill in the art at the time of invention to provide for a porous surface on the Hamada in view of Gross et al and Büttner-Janz et al in order to allow bone growth material to be received which in turn improves implant fixation with the surrounding bone.

### ***Allowable Subject Matter***

Claims 15-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claims 1-4, 6-10, 13-14 have been considered but are moot in view of the new ground(s) of rejection.

With regards to applicant's previous discussion of the relative angle designation, this was deemed persuasive. However, in further review, it is still held that this limitation is met by Gross, which has been noted in the above rejection. Thus, the claim amendments directed to this limitation are still rejected in view of prior art.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES L. SWIGER whose telephone number is (571)272-5557. The examiner can normally be reached on M-F 9-530.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Barrett can be reached on 571-272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES L. SWIGER/  
Examiner, Art Unit 3775

/Thomas C. Barrett/  
Supervisory Patent Examiner, Art  
Unit 3775